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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,292	04/02/2001	Charles M. Link II	BLL-0217	8769

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CANTOR COLBURN LLP - BELLSOUTH  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

EXAMINER

NGUYEN, DUC M

ART UNIT PAPER NUMBER

2618

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/822,292

Applicant(s)

LINK ET AL.

Examiner

Duc M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 12, 14-17, 19-24, 27, 28, 40-48, 51, 53-55, 57-60 and 63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12, 14-17, 19-24, 27, 28, 40-48, 51, 53-55, 57-60 and 63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

This action is in response to the applicant's response filed on 9/18/06. Claims 1-9, 12, 14-17, 19-24, 27-28, 40-48, 51, 53-55, 57-60, 63 are now pending in the present application. **This action is made final.**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-8, 14-17, 20-24, 40-47, 51, 53-55, 57-60** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Daly** (US Pat No. **6,122,503**) in view of **Leung** (US **6,195,546**) and **Josenhans et al** (US **5,953,653**).

Regarding claim **1**, **Daly** discloses a method for updating the memory (internal database) of a mobile phone via over-the-air programming (OTAP) using SMS messages which would include all the claimed limitations (see **col. 3, line 65 - col. 4, line 48**), comprising:

- receiving a first information relating to a new or revised (update) agreement between a wireless service provider and a subscription company servicing the first wireless device, the first item of information corresponding to at least one wireless service provider that is associated with a local calling area as

- claimed (see **col. 5, line 52 – col. 6, line 9 and col. 3, lines 47-48**);
- targeting a set of subscribers (subset) associated with wireless devices for receiving the first information as claimed (see **col. 4, lines 14-18**);
  - receiving a second information related to autonomous registration event (active or inactive) via IS-41 link (see **col. 5, line 52 – col. 6, line 9 and col. 10, lines 1-15**);
  - transmitting a third information (updates information regarding system operator or service providers in SMS format) as claimed (see **col. 5, line 52 – col. 6, line 9 and col. 10, lines 1-15**);

As to the newly added limitation regarding tracking the pendency of the entry in the pending database for determining a period of time elapsed since the transmitting of a third item of information where no acknowledgement has been received from the wireless device, it is noted that when transmitting an OTAP message to the wireless device, it would have been obvious to one skilled in the art to set a timeout period for receiving an acknowledgement message from the wireless device as disclosed by **Leung** (see col. 10, lines 41-49, col. 12, lines 33-39), in order to determine the success/failure of the transmitted message. Therefore, in view of **Leung**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate **Leung's** teaching to **Daly**, for providing a timeout timer in **Daly** as well, for determining a period of time elapsed since the transmitting of a third item of information (OTAP message) where no acknowledgement has been received from the wireless device, in order to determine the success/failure of the transmitted message.

As to the newly added limitation regarding a protocol analysis for monitoring and detecting a registration signal, it is noted that since **Daly** discloses that “when the MSC receives the registration it sends an IS-41 registration notice (REGNOT) to the HLR” (see **col. 10, lines 1-4**), one skilled in the art would recognize that the MSC in **Daly** would obvious utilize a device similar to the protocol analyzer as disclosed by **Josenhans**, for monitoring and detecting registration request messages (see **col. 4, lines 50-56**). Therefore, in view of **Josenhans**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **Daly** for utilizing a protocol analyzer in the MSC in **Daly** as well, in order to monitor and detect registration request messages, for transmitting REGNOT messages to the HLR for evaluations.

Regarding claims **2-8**, they are rejected for the same reason as set forth in claim **1** above. In addition, **Daly** further discloses

- converting first information to SMS message (see **col. 10, lines 1-15**) ;
- comparing second information with a record in a concerned data base (see **col. 6, lines 20-63**);
- a state of record (pending or waiting indicator, see **col. 6, lines 20-63**);
- retrieve message for a wait state record (see **col. 6, lines 20-63** and **col. 10, lines 1-15**)
- assembling third information based on characteristics of the wireless device (see **col. 6, lines 20-63**);
- third information is an SMS message (see **col. 10, lines 1-15**) ;

- create an entry in a pending database as claimed (clear indicators, see **col. 3, lines 61-62**);

Regarding claims **14-17**, the claims are interpreted and rejected for the same reason as set forth in claims 1-8 above.

Regarding claims **40-47**, the claims are interpreted and rejected for the same reason as set forth in claims **1-9, 13** above, respectively.

Regarding claims **20-24**, the claims are rejected for the same reason as set forth in claim 1 above. In addition, although **Daly** fails to disclose the centralized database of the HLR is organized into specific databases (pending, concerned and history databases) as claimed, it would have been obvious to one skilled in the art of databases to modify **Daly** to organize databases into specific databases as claimed, for easy management of databases.

Regarding claim **55**, the claim is rejected for the same reason as set forth in claim 53 above. In addition, **Daly** discloses the wireless device transmits acknowledgement as claimed (see **col. 9, lines 33-35**).

Regarding claim **26**, the claim is rejected for the same reason as set forth in claim 11 above.

Regarding claims **49-51**, the claims are interpreted and rejected for the same reason as set forth in claims **10-12** above.

Regarding claims **53, 57**, the claims are rejected for the same reason as set forth in claim 1 above. In addition, although **Daly** fails to disclose the centralized database of the HLR is organized into specific databases (pending, concerned and history

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databases) as claimed, it would have been obvious to one skilled in the art of databases to modify **Daly** to organize databases into specific databases as claimed, for easy management of databases.

Regarding claims **58-59**, the claims are rejected for the same reason as set forth in claim 53 above. In addition, **Daly** as modified would obviously disclose the step of retrieving a SMS message as claimed (see col. 7, lines 58-65).

Regarding claim **60**, the claim is rejected for the same reason as set forth in claim 53 above. In addition, it is clear that **Daly** would obviously disclose the step of receiving autonomous registration from the network as claimed (see col. 10, lines 1-15).

3. Claims **9, 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Daly** in view of **Josenhans and Leung** and further in view of **Seazholtz et al (US 5,790,952)**.

Regarding claims **9, 48**, **Daly** as modified would disclose all the claimed limitations, see claims 4, 44, except for an unable state after a specified number of attempts has been made unsuccessful. However, **Seazholtz** discloses a method for discarding data and marking a mobile as unable after a specified number of attempts has been made unsuccessful (see col. 34, lines 59-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate **Seazholtz's** teaching to **Daly**, for providing a maximum number of attempts in **Daly** as well, for discarding data and marking a mobile as unable after a specified

number of attempts has been made unsuccessful, in order to conserve bandwidths and resources (i.e, avoid keep transmitting failed attempts).

4. Claims **9, 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Daly** in view of **Josenhans** and **Leung** and further in view of **D' Avello et al** (US 4,831,647).

Regarding claims **9, 48, Daly** as modified would disclose all the claimed limitations, see claims 4, 44, except for an unable state after a specified number of attempts has been made unsuccessful. However, **D' Avello** teaches a message delivery method wherein an error status is flagged after a predetermined number of attempts has been made (see Fig. 12 B). Therefore, in view of **D'Avello**, it would have been obvious to one skilled in the art at the time the invention was made to set a maximum number of attempts (or retries) in **Daly** as well, and would set an "error" or "unable" status flag to indicate such status if the maximum number of attempts has been made, to conserve bandwidths and resources (i.e, avoid keep transmitting failed attempts).

5. Claims **12, 19, 27, 63** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Daly** in view of **Leung** and **Josenhans**, and further in view of **McConnell** (US 6,418,306).

Regarding claims **12, 19, 27, 63, Daly** as modified would disclose all the claimed limitations, see claim 1 above, except for the limitation regarding SS-7 data link.



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However, it is noted that since the IS-41 or SS-7 links are both known for connecting links between switching points in a wireless network as disclosed by **McConnell** (see **col. 4, lines 33-40**), it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate **McConnell's** teaching to **Daly** to use SS7 link in place of IS-41 as well, for utilizing advantages provided by SS7 such as flexibility and cost. Therefore, in order to receive registration notice, it is clear that a filter would obviously be used in order to filter registration messages from raw SS7 data.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 14, 20, 40 and 53 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,610,973 to **Comer** also discloses a protocol analyzer for monitoring and detecting a registration signal.

9. **Any response to this final action should be mailed to:**

Box A.F.

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893, Monday-Thursday (9:00 AM - 5:00 PM).

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Or to Matthew Anderson (Supervisor) whose telephone number is (571) 272-4177.

Duc M. Nguyen, P.E.

Nov 12, 2006

A handwritten signature in black ink, appearing to read 'Duc M. Nguyen', with a long horizontal flourish extending to the right.